




# nicolagiacchetta

software engineer

## contact

✉ Haggerston  
London, UK

+(44) 7397 921621  
hello at nicolagiacchetta.it  
www.nicolagiacchetta.it

 nicola.giacchetta  
 nicolagiacchetta  
 nicolagiacchetta

## languages

**Italian:** mother tongue  
**English:** advanced  
**French:** conversational  
**Spanish:** conversational

## skills

### Java Ecosystem:

Java8, Gradle, Maven,  
Jenkins, Dropwizard,  
Tomcat, JUnit, Mockito

### Message/Streaming

**Platform:** Apache Kafka

### Databases:

MySQL, Couchbase

### Cloud Services:

AWS Dynamo DB,  
Google Cloud Datastore

### Collaboration Tools:

GitHub, SVN, Perforce

### Frontend:

Html5, CSS3,  
Javascript, JQuery

### Other:

Consul, Docker,  
Bash, XML, JSON,  
PHP, C/C++

## interests

### Professional

Distributed Systems  
Microservices  
RESTful APIs  
Clean Code

### Personal

football  
tennis  
music  
vinyls  
cooking  
photography  
traveling

## education

### Master of Computer Engineering

Università degli Studi di Napoli Federico II

Thesis: *Resource efficient sensor allocation for geographic range queries in IoT Service Orchestration.*

Final Grade: 110/110

Napoli, Italy | Oct 2015

### Bachelor of Computer Engineering

Università degli Studi di Napoli Federico II

Napoli, Italy | Dec 2011

## work experience

### Java Backend Developer Nexmo

London, UK | Dec 2016–Present

Designed and maintained the core backend of a Cloud Communication Platform, troubleshooting concurrency bugs, as well as scalability and performance issues in a large (~N x 1000 RPS on 6 DCs) real-time distributed system.

- developed new RESTful APIs
- extracted 3 microservices from a complex monolithic application
- worked on performance bottlenecks due to the low cardinality of AWS Dynamo DB indexes
- worked on the migration from AWS DynamoDB to Google Cloud Datastore
- worked on a data pipeline to anonymize users' PII in the platform to comply with the GDPR
- implemented a service to perform Failure Detection and health statuses aggregation
- worked on a tool to perform cross-DC MySQL Master-Slave replication and Master failover
- mentored junior team members and took part in several hiring processes

### Software Engineer EidosMedia

Milan, Italy | Dec 2015–Oct 2016

Developed a software layer to expose the core functionalities of the backend of a Digital Content Publishing Platform via RESTful APIs.

- developed algorithms to manage the internal document model of the platform
- increased unit test coverage (from ~30% to ~90%)
- refactored a key internal web service reducing its codebase from ~5000 to ~4000 LoC
- implemented a plugin for the integration with the Apple News API

### Research & Development Intern NEC Laboratories Europe

Heidelberg, Germany | Jan–Jun 2015

Built a Java module implementing a resource efficient sensor allocation algorithm for geographic range queries to be integrated in the IoT Broker GE.

- carried out most of the scientific research to find an algorithmic solution for the problem
- implemented the chosen algorithm in Java and a JavaFX-based simulation environment

### Web Developer StudiInTlc

Scafati, Italy | Mar–Dec 2014

Provided expertise and deep understanding of the web tech stack (TCP/IP, HTTP, HTML5, CSS3, JavaScript, PHP), gained experience using the most common CMS platforms (Wordpress, Prestashop) & in troubleshooting cross-browser and cross-devices compatibility issues.

## extra curricular activities

### Team Kanban Practitioner (TKP) Lean Kanban University

London, UK | Jun 2017

Completed training in improved collaboration and Team Kanban concepts based on the Kanban Method and accepted by Lean Kanban University as a Team Kanban Practitioner.

### Freelance Web Developer

Naples, Italy | Feb 2013–Dec 2014

Implemented web solutions (websites and e-commerce) for clients of various markets.

- fashion & clothing (Plainstore.it, Revenge)
- retail (La Riggiola)
- art: film production (O'Groove), singers (Carola Moccia, Be Quiet Nights)

### Co-Founder & Administrator Zerottouno.it

Naples, Italy | Jan 2012–Feb 2013

Co-founded a website where the users could get all-round information about the town of Naples. The aim was to create a virtual community built around a news aggregator.

- co-managed a team of 9 people (6 bloggers, 1 UI designer, 2 Developers)
- built a community of thousands of active users (~N x 100K unique page-views per Month)